

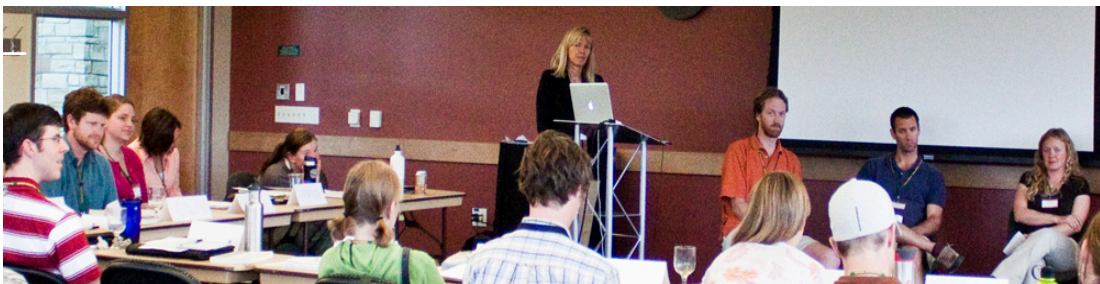
Center for Multiscale Modeling of Atmospheric Processes (CMMAP), Colorado State University - A National Science Foundation (NSF) Science and Technology Center
David A. Randall, PI; A. Scott Denning, J. Helly, C.-H. Moeng, and W. S. Schubert, Co-PIs ATM-0425247

Recently, The School of Global Environmental Sustainability (SOGES), the Graduate Degree Program in Ecology, and the Center for Multiscale Modeling of Atmospheric Processes (CMMAP) sponsored the 2011 Environmental Science Communication Workshop for 23 doctoral and post-doc Fellows. Jim Benedict, a CMMAP post-doc, attended the workshop and has provided a brief overview of the two-day event.

It is the age of information. It is bombarding us from all directions. As part of the mass media explosion, global climate change is receiving more attention. The job for journalists—and the scientists they interview—has become critically important. Journalists report on cutting-edge science for the curious public. They artfully filter an abundance of information and package it for literary scholars, astrophysicists, local and national government officials, and the voters who elect them. Members of the media can strongly influence public opinion and thereby impact public policy. When scientists speak directly to the public, the journalist filter is bypassed. Both young and veteran scientists must learn to accurately communicate their research findings to non-specialists... and soon.

On May 9-10, thirty doctoral and postdoctoral students from Colorado State University (CSU) participated in the 2011 Environmental Science Communications Workshop, which was sponsored by the School of Global Environmental Sustainability, the Graduate Degree Program in Ecology, and the Center for Multiscale Modeling of Atmospheric Processes (see <http://soges.colostate.edu/communicationsworkshop> for full description). I had the privilege of participating in this workshop, and it made clear the rewards, risks, and responsibilities that come with stepping into the public eye.

“Step out of your comfort zone,” were the words on a slide during the workshop’s opening presentation—complete with an image of a gauge and its needle pivoting reluctantly from green to red. Speaking to the media and the public, as it turns out, is not at all like speaking to other scientists at a conference. I sensed then that “thunderstorms” would be replacing “deep moist convection” in my vocabulary until further notice. During the workshop, we learned that skill is essential to becoming an effective communicator, to know



Nancy Baron, Outreach Director of the Communication Partnership for Science and the Sea (COMPASS), Aldo Leopold Leadership Program, speaks to young scientists from Colorado State University during the Environmental Science Communication Workshop.

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who the audience is and how to adapt the message to fit them. Are they knowledgeable about the subject? Will they be receptive to the message? How can I make the topic more interesting? We learned that answering these questions before speaking to the media or developing a public speech makes it much easier to engage the audience and communicate our findings and ideas successfully.

Another important topic that emerged from the workshop was the challenge for many of us young scientists to see and understand how our concentrated area of research relates to “The Big Picture,” which includes the connections among the branches of science and between science and society. Too often we become so focused on the details of our research—investigating why something behaves as it does—that we forget its broader context and why we study it in the first place. The links among society, animals, plants, soils, water, and weather, and how these connections might be altered by climate change, were brought to the forefront during our workshop discussions.

As global climate change and its impacts on our society and the environment continue to make headlines, we as scientists will be called upon to explain to the public what our lab results, computer models, and field experiments mean to them and to the world. Programs like the 2011 Environmental Science Communications Workshop at CSU provide young scientists with the tools required to effectively communicate with any audience, and to face the challenges of stepping out of our comfort zone.

Jim Benedict received his Ph.D. from Colorado State University, Department of Atmospheric Science focusing on tropical weather patterns and their impact on global climate. CMMAP is a Science and Technology Center funded by the National Science Foundation (NSF).